

IN THE SPECIFICATION

Please amend the ABSTRACT section of the application to read as follows. (This section has been amended in the manner required by 37 C.F.R. §1.121(b)(2). Accompanying this Second Preliminary Amendment is Appendix I in which a marked-up copy of the amended section is provided showing all changes (i.e., with the deleted portions bracketed and the additions underlined), pursuant to 37 C.F.R. §1.121(b)(2)(iii).)

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ABSTRACT

A coil for creating improved homogeneity in magnetic flux density in a radio frequency resonator for magnetic resonance imaging and spectroscopy of the human head. The coil has a plurality of conductive members. Each of the conductive members has a linear portion and a tapered portion. The conductive members are arranged to form a first opening having a first diameter and a second opening having a second diameter, with the second diameter being different from the first diameter. The tapered portions of the conductive members provide the coil with a substantially homogeneous pattern of magnetic flux density in at least one of three orthogonal imaging planes of the coil.

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IN THE CLAIMS

Please add claims 46-93 as directed below. (The claims have been amended in the manner dictated by 37 C.F.R. §1.121(c)(1). Because claims have only been added or canceled herein, pursuant to 37 C.F.R. §1.121(c)(1)(ii) no marked up version of the added and canceled claims is provided herewith.)

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46. (New) A coil for use with a magnetic resonance (MR) system, said coil comprising:
- (a) a plurality of conductive members each having a linear portion and a tapered portion;